pected focus did not reveal the presence of raccoons, thus reducing the chance that *D. tenuis* was present. A single infected mosquito does not allow any definitive statements to be made, but *Ae. trivittatus* should be considered a potential vector of dog heartworm in Knox Co., Tennessee.

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References Cited

Christensen, B. M. and W. N. Andrews. 1976. Natural infection of *Aedes trivittatus* (Coq.) with *Dirofilaria immitis* in central Iowa. J. Parasitol. 62:276–280.

Magoon, E. H. 1935. A portable stable trap for capturing mosquitoes. Bull. Entomol. Res. 26:363–369.

Pinger, R. R. 1982. Presumed *Dirofilaria immitis* infections in mosquitoes (Diptera: Culicidae) in Indiana, USA. J. Med. Entomol. 19:553–555.

Shemanchuk, J. A. 1978. A bait trap for sampling the feeding populations of blood-sucking Diptera on cattle. Quaest. Entomol. 14:433–439.

Taylor, A. E. R. 1960. The development of *Dirofilaria immitis* in the mosquito *Aedes aegypti*. J. Helminthol. 34:27–38.

AEDES THIBAULTI: A NEW ADULT RECORD FROM RHODE ISLAND[1]

J. E. COOKMAN[2], N. E. SCARDUZIO[2] AND R. A. LEBRUN[3]

The first recorded capture of *Aedes (Ochlerotatus) thibaulti* Dyar and Knab occurred at South Kingstown, Washington County, Rhode Island on August 16, 1984. The adult female was trapped in a CO_2-baited CDC light trap during a state-wide survey for mosquitoes infected with Eastern equine encephalitis virus. Three more adult females were captured at the same site on August 22, 1984, and another adult female was trapped on September 7 in Warwick, Kent County at a site about 30 miles north of the South Kingstown site. This record now brings to 38 the total number of mosquito species reported from Rhode Island (LeBrun et al. 1983). Prior to this, Connecticut was the only New England state from which *Ae. thibaulti* had been reported (Darsie and Ward 1981).

Identification was made by Dr. Ronald A. Ward, Walter Reed Army Institute of Research, Washington, D. C. Voucher specimens are deposited in the University of Rhode Island reference collection.

References Cited

Darsie, R. F., Jr. and R. A. Ward. 1981. Identification and geographical distribution of the mosquitoes of North America, north of Mexico. Mosq. Syst. Suppl. 1:1–313.

LeBrun, R. A., D. Boyes, P. Capostosto and J. Marques. 1983. Annotated list of the mosquitoes of Rhode Island. Mosq. News 43:435–437.

[1] Rhode Island Agricultural Experiment Station Journal Article No. 2265.

[2] Rhode Island Department of Environmental Management, Government Center, Wakefield, RI 02879.

[3] Department of Plant Pathology and Entomology, University of Rhode Island, Kingston, RI 02881.

TWO BASIC PROGRAMS FOR STATISTICAL ANALYSIS OF PERIODICITY DATA, BASED ON THE SINE-WAVE FUNCTION[1]

J. R. LINLEY

Florida Medical Entomology Laboratory, Institute of Food and Agricultural Sciences, University of Florida, 200 9th Street, S.E., Vero Beach, FL 32962.

To provide a simplified statistical approach to the analysis of microfiliarial periodicity in human filariasis, Aikat and Das (1976) developed a modified form of the harmonic (sine-wave) equation first applied to such data by Sasa and Tanaka (1972, 1974). Several examples of the method as applied to microfilarial periodicity of the mosquito-borne human parasite *Wuchereria bancrofti* are given by Aikat and Das (1976). Similarly, Pichon (1983) has recently tested the periodicities of *Mansonella ozzardi* microfilariae in individual human infections. Since *Culicoides* spp. are involved in the transmission of *M. ozzardi,* I became interested in a better understanding of the method and developed two BASIC programs, SINFIT and SINCOM, which will plot the data and perform the required calculations. Personal computers are now in common use and it was felt that the programs might be useful to other workers. SINFIT fits the data to the sine-wave function, performs a test for significant periodicity,

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